

Notice of Allowability**Application No.**

10/758,266

Examiner

JAMES RUTTEN

Applicant(s)

LIANG ET AL.

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/29/08.
2. ☒ The allowed claim(s) is/are 55, 58-65, 68-74 (renumbered 1-16).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192

DETAILED ACTION

1. This action is in response to Applicant's submission filed 10/29/08, responding to the 4/30/08 Office action which detailed the rejection of claims 55-74. Claims 55, 66-67, 69-73 have been amended. Claims 55-74 remain pending in the application and have been fully considered by the examiner.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/30/08 has been entered.

Response to Arguments

3. The amendment to claim 1 has overcome the rejection under 35 U.S.C. § 101, which is likewise withdrawn.

4. The amendments to claims 66-67 and 69-71 have overcome the rejection under 35 U.S.C. § 112, second paragraph, which is likewise withdrawn.

5. In section V on page 6 filed 6/30/08, Applicant points to declarations filed in parent application 09/856,779 verifying that inventor Sheng Liang is the author of prior art of record JVMPI. The declaration is persuasive, and so the reference is not available as prior art under 35 U.S.C. § 102(e). Therefore, the rejection has been withdrawn.

EXAMINER'S AMENDMENT

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Tarek Fahmi, Reg. No. 41,402 on 12/4/08. In the interview, it was agreed to incorporate features of claims 56 and 57 into each independent claim along with additional limitations which together provide allowable subject matter.

The application has been amended as follows:

AMENDMENTS TO THE CLAIMS

Please amend claims 55, 58, 65, 68, and 74, and cancel claims 56-57 and 66-67 as follows:

Claim 55 (Currently Amended) A system, comprising:

a processor;~~and~~

memory[~~[.]; and~~

a virtual machine;

wherein the processor and the memory are configured to facilitate providing a virtual machine profiler interface that communicates information regarding activities of a garbage collector, and a profiler that reports the activities;

wherein the virtual machine creates a plurality of arenas within a heap to facilitate garbage collection;

wherein the profiler comprises a profiler agent for providing at least one of a request for specific types of events and information or an enablement notification of specific types of events and information; and

wherein at least one event is used to dynamically manage garbage collection in the heap, wherein said at least one event is independent of any algorithm for dynamically managing garbage collection in the heap, thereby supporting any implemented garbage collection methods.

Claims 56-57 (Canceled)

Claim 58 (Currently Amended): After "according to" please delete [[claim 57]] and insert "claim 55".

Claim 65 (Currently Amended) A method, comprising:
communicating, via a virtual machine profiler interface, information regarding activities of a garbage collector; ~~and~~
reporting the activities using a profiler which comprises a profiler agent;
facilitating the virtual machine profiler interface and profiler with a processor and a memory;
creating, with a virtual machine, a plurality of arenas within a heap to facilitate garbage collection;

providing, using the profiler agent, at least one of a request for specific types of events and information or an enablement notification of specific types of events and information; and dynamically managing garbage collection in the heap using at least one event, wherein said at least one event is independent of any algorithm for dynamically managing garbage collection in the heap, thereby supporting any implemented garbage collection methods.

Claims 66-67 (Canceled)

Claim 68 (Currently Amended): After "according to" please delete [[claim 67]] and insert "claim 65".

Claim 74 (Currently Amended) A computer-readable storage device, comprising instructions for one or more processors to:

communicate, via a virtual machine profiler interface, information regarding activities of a garbage collector;~~and;~~

report the activities using a profiler comprising a profiler agent;

create, with a virtual machine, a plurality of arenas within a heap to facilitate garbage collection;

provide, using the profiler agent, at least one of a request for specific types of events and information or an enablement notification of specific types of events and information; and

dynamically manage garbage collection in the heap using at least one event, wherein said at least one event is independent of any algorithm for dynamically managing garbage collection in the heap, thereby supporting any implemented garbage collection methods.

Allowable Subject Matter

7. The following is an examiner's statement of reasons for allowance:

The examiner indicated that this application would be in condition for allowance if the independent claims 55, 65, and 74 are amended to include the features of claims 56-57 and wherein at least one event is used to dynamically manage garbage collection in the heap, wherein said at least one event is independent of any algorithm for dynamically managing garbage collection in the heap, thereby supporting any implemented garbage collection methods. The above features, taken in combination with all remaining features of the independent claim are not taught or suggested by the prior art of record. The applicant agreed to amend the independent claims 55, 65, and 74 as indicated by the examiner. The distinctions provided by the independent claims apply equally to all dependent claims. Thus all remaining pending claims 55, 58-65, and 68-74 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES RUTTEN whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. R./
Examiner, Art Unit 2192

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192